

# Issues Paper: Allowable Revenue for the Independent Market Operator and System Management 2010/11 to 2012/13

24 December 2009

Economic Regulation Authority



WESTERN AUSTRALIA

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Economic Regulation Authority  
Perth, Western Australia  
Phone: (08) 9213 1900

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# 1 Introduction

## 1.1 Background and Scope of this Issues Paper

Under clauses 2.22 and 2.23 of the Wholesale Electricity Market Rules (**Market Rules**), the Economic Regulation Authority (**Authority**) is required to determine amounts of allowable revenue for the Independent Market Operator (**IMO**) and System Management. Determinations are made for review periods of three years duration, the first of which was 1 July 2007 to 30 June 2010 (**first review period**), and the second of which is 1 July 2010 to 30 June 2013 (**second review period**).

The amounts of allowable revenue determined by the Authority form the basis of annual budgets for the IMO and System Management. The budgets must be consistent with the determinations of allowable revenue, but include adjustments to account for surpluses or shortfalls in revenues from market fees and system operation fees (for the IMO and System Management, respectively) for the year prior to the budget.

The IMO and System Management have each submitted to the Authority a proposal for allowable revenue over the second review period.<sup>1</sup> These proposals are available on the Authority's [web site](#).<sup>2</sup>

The Authority has prepared this issues paper to assist interested parties in understanding and making submissions on the proposals.

The remainder of this issues paper addresses the following matters:

- the requirements of the Market Rules for determinations of allowable revenue;
- the process to be followed by the Authority in making determinations of allowable revenue; and
- summary information on the proposals submitted by the IMO and System Management.

## 1.2 How to Make a Submission

A notice has been posted on the Authority's web site advising the release of this issues paper. This notice invites submissions to be lodged with the Authority by **4.00pm (Western Standard Time) on Wednesday 27 January 2010**. Submissions should be in written and electronic form (where possible) and addressed to:

Issues Paper: Determination of allowable revenue for the IMO and System Management, and ancillary service parameters 2010/11 to 2012/13

Economic Regulation Authority  
PO Box 8469  
Perth Business Centre  
PERTH WA 6849

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<sup>1</sup> Independent Market Operator, 30 November 2009, ERA Submission Proposal for Allowable Revenue 1 July 2010 to 30 June 2013. Western Power, 26 November 2009, System Management Allowable Revenue Application 1 July 2010 to 30 June 2013.

<sup>2</sup> ERA web site, Determination of the IMO and System Management Allowable Revenue, [http://www.era.wa.gov.au/2/272/42/determination\\_o.pm](http://www.era.wa.gov.au/2/272/42/determination_o.pm)

Email: [publicsubmissions@era.wa.gov.au](mailto:publicsubmissions@era.wa.gov.au)  
Fax: (08) 9213 1999

In general, submissions from interested parties will be treated as in the public domain and placed on the Authority's web site. Where an interested party wishes to make a confidential submission, it should clearly indicate the parts of the submission that are confidential.

The receipt and publication of a submission shall not be taken as indicating that the Authority has knowledge either actual or constructive of the contents of a particular submission and, in particular, whether the submission in whole or in part contains information of a confidential nature and no duty of confidence will arise for the Authority in these circumstances.

Further information regarding this issues paper can be obtained from:

Mr Chris Brown  
Acting Assistant Director, Electricity Market Surveillance  
Economic Regulation Authority  
Tel: (08) 9213 1992  
Fax: (08) 9213 1999  
E-Mail: [chris.brown@era.wa.gov.au](mailto:chris.brown@era.wa.gov.au)

Media enquiries should be directed to:

Ms Sue McKenna  
Ms Joanne Fowler  
The Communications Branch Pty Ltd  
Ph: 61 8 9472 4411  
Mb: 0424 196 771 (Sue)  
0408 878 817 (Joanne)



## 1.3 Summary of Issues

### Issues

Submissions are invited from interested parties on the process that the Authority intends to follow in making a determination on allowable revenue for the IMO and System Management.

Submissions are invited from interested parties on the principal assumptions indicated by the IMO to have been applied in derivation of the forecast of costs for the second review period.

Submissions are invited from interested parties on the proposed capital projects indicated by the IMO to have been included in derivation of the forecast of costs for the second review period.

Submissions are invited from interested parties on the principal methods and assumptions indicated by System Management to have been applied in derivation of the forecast of recurring costs for the second review period.

Submissions are invited from interested parties on the proposed capital projects indicated by System Management to have been included in derivation of the forecast of costs for the second review period.

## 2 Requirements of the Market Rules

Clauses 2.22 and 2.23 of the Market Rules require the Authority to determine amounts of allowable revenue for the IMO and System Management to provide certain specified services.

For the IMO, the services are defined in clause 2.22.1 of the Market Rules as:

- market operation services, including the IMO's operation of the reserve capacity market, short term electricity market and balancing and the IMO's settlement and information release functions;
- system planning services, including the IMO's performance of the long term "projected assessment of system adequacy" and functions under Chapter 5 of the Market Rules; and
- market administration services, including the IMO's performance of the Market Rule change process, Market Procedure change process, the operation of the Market Advisory Committee and other consultation, monitoring, enforcement, audit, registration related functions and other functions under the Market Rules.

For System Management, the services are defined in clause 2.23.1 of the Market Rules as:

- system operation services, including all of System Management's functions and obligations under the Market Rules.<sup>3</sup>

The requirements of the Market Rules for the Authority's determination of allowable revenue are materially the same for the IMO and System Management:

- the IMO and System Management must each submit a proposal for allowable revenue (for the IMO) or costs (for System Management) by 30 November prior to the start of the review period;<sup>4</sup>
- the Authority must undertake a public consultation process in approving the allowable revenue, which must include publishing an issues paper and issuing an invitation for public submissions;
- by 31 March of the year in which the review period commences, the Authority must determine the allowable revenue for the review period.<sup>5</sup>

Factors that the Authority must take into account in determining amounts of allowable revenue are also the same for the IMO and System Management and are as follows.<sup>6</sup>

- The allowable revenue must be sufficient to cover the forward looking costs of providing the relevant services in accordance with the following principles:
  - i. recurring expenditure requirements and payments are recovered in the year of expenditure;
  - ii. capital expenditures are to be recovered through the depreciation and amortisation of the assets acquired by the capital expenditure in a manner that is consistent with good accounting principles;
  - iii. costs incurred that are related to market establishment, as designated by the Minister, are to be recovered over a period determined by the Minister from "energy market commencement"; and
  - iv. notwithstanding (i), (ii) and (iii), expenditure incurred and depreciation and amortisation charged, in relation to any "declared market project"<sup>7</sup> are to be recovered over the period determined for that declared market project.
- The allowable revenue must include only costs that would be incurred by a prudent provider of the services, acting efficiently, seeking to achieve the lowest practically sustainable cost of delivering the services in accordance with the Market Rules, while effectively promoting the wholesale market objectives.
- Where possible, the Authority should benchmark the allowable revenue against the costs of providing similar services in other jurisdictions.

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<sup>3</sup> Prior to 30 November 2009, clause 2.23.1 of the Market Rules also included as a service provided by System Management "System Management's functions and obligations under these Market Rules in relation to the provision of Ancillary Services". This function was removed by a change to the Market Rules effective as of 30 November 2009 (Market Rule Change Proposal 2009\_23 System Management Review Period Budget Coverage Amendment).

<sup>4</sup> Clause 2.22.3 of the Market Rules refers to a "proposal for its allowable revenue" for the IMO whereas clause 2.23.3 refers to a "proposal for its costs" for System Management.

<sup>5</sup> Clauses 2.22.3 and 2.23.3 of the Market Rules.

<sup>6</sup> Clauses 2.22.12 and 2.23.12 of the Market Rules.

<sup>7</sup> A "declared market project" is a project declared as such by the IMO under clause 2.22.13 of the Market Rules.

### 3 Process to be followed by the Authority

The process that the Authority intends to apply in its determinations of allowable revenue for the IMO and System Management is to assess the proposals against benchmarks of the costs in the first review period, with additional consideration of items of capital expenditures that underlie amounts of depreciation and amortisation in allowable revenue.

The assessment of the proposals against benchmarks of costs in the first review period will apply to costs of a recurrent nature and will involve:

- establishing cost benchmarks from the actual costs incurred by each entity over the first review period, corrected for any abnormal or non-recurring costs during that period;
- identifying and assessing the changes in costs embodied in the allowable revenue proposals that are in the nature of “trend changes”, reflecting cost drivers such as an increasing scale of operations and inflation of unit costs; and
- identifying and assessing the changes in costs embodied in the allowable revenue proposals that are in the nature of “step changes”, reflecting changes in the nature of activities being undertaken (such as where new functions or activities are assumed), or changes in the manner in which activities are undertaken (such as transfers of certain activities from being undertaken in-house to being undertaken by contractors).

The Authority does not intend benchmarking the costs of the IMO and System Management against the costs of providing similar services in other jurisdictions, as contemplated by sub-clauses 2.22.12(c) and 2.23.12(c) of the Market Rules. The Authority considers that it is not practical to undertake such a benchmarking study as there are no directly comparable entities to the IMO and System Management in other jurisdictions in terms of scale of operations, the structure of the businesses and the nature of activities.

For costs of a capital nature, the Authority will consider actual and forecast capital expenditures of the first and second review period that underlie amounts of depreciation and amortisation in the amount of allowable revenue. The Authority expects the IMO and System Management to provide supporting information for capital projects, with this supporting information being sufficient to demonstrate the expenditures to be consistent with costs that would be incurred by a prudent provider of services, acting efficiently and seeking to achieve the lowest practicably sustainable cost of delivering services. The Authority will also undertake an assessment of whether amounts of depreciation and amortisation included in allowable revenue have been appropriately determined from capital expenditures in a manner consistent with generally accepted accounting principles.

#### Issue

Submissions are invited from interested parties on the process that the Authority intends to follow in making a determination on allowable revenue for the IMO and System Management.

## 4 Independent Market Operator Proposal

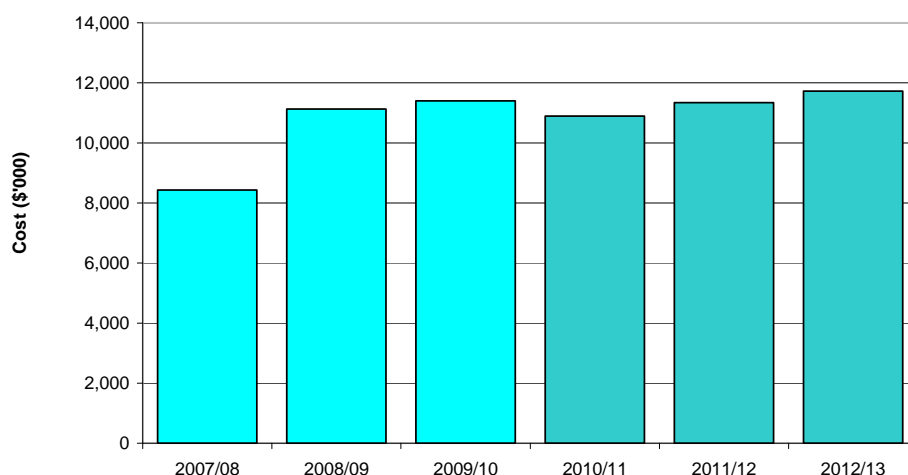
In the proposal submitted to the Authority, the IMO has provided information on actual and forecast costs for the first review period and forecast costs for the second review period, with costs expressed consistently with the determination of allowable revenue (i.e., as line items of recurrent expenditures and allowances for depreciation and interest charges) (Table 4.1).

**Table 4.1 IMO: actual costs for the first review period (2007/08 to 2009/10) and proposed allowable revenue for the second review period (2010/11 to 2012/13) (nominal \$'000)**

Cost item	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
	Actual	Actual	Forecast	Forecast	Forecast	Forecast
Recurrent costs						
Employee Benefits	2,772	3,516	3,696	4,013	4,269	4,545
Accommodation	268	290	271	325	396	445
Supplies and Services	2,339	4,014	4,947	4,684	4,373	4,456
Capital costs						
Borrowing Costs	388	331	88	188	242	262
Depreciation	2,960	3,305	2466	1712	2089	2046
<b>Total Costs</b>	<b>8,727</b>	<b>11,456</b>	<b>11,468</b>	<b>10,922</b>	<b>11,369</b>	<b>11,754</b>
Less Interest Income	-295	-331	-67	-25	-25	-25
<b>Total</b>	<b>8,432</b>	<b>11,125</b>	<b>11,401</b>	<b>10,897</b>	<b>11,344</b>	<b>11,729</b>

Information provided in the IMO's proposal indicates total costs to be slightly lower in 2010/11 than in the last two years of the first review period and then increasing in 2011/12 and 2012/13 at an average rate of 3.75 per cent per annum in nominal terms (Figure 4.1).

**Figure 4.1** IMO: actual costs for the first review period (2007/08 to 2009/10) and proposed allowable revenue for the second review period (2010/11 to 2012/13)



Principal assumptions indicated by the IMO to have been applied in derivation of the forecast of costs for the second review period are indicated in Table 4.2.

**Table 4.2** Principal assumptions indicated by the IMO to have been applied in derivation of forecasts of costs for the second review period

Cost or calculation parameter	Assumption of basis of cost forecast
Escalation rate for general inflation of unit costs	Rates applied as advised by the Department of Treasury and Finance: 2010/11- 2.25% 2011/12- 2.75% 2012/13- 2.75%
Employment benefit costs	Creation of two additional staff positions: communications manager and corporate support officer. Increases in salary costs to meet market salary levels in accordance with advice from an independent remuneration consultant with resultant remuneration increases of: 2010/11- 5% 2011/12- 5% 2012/13- 7%
Accommodation costs	Forecast costs are based on a current lease agreement to 2012. With a requirement to vacate current premises in 2012, subsequent costs are based on advice from the Department of Housing and Works.
Supplies and services	Forecast costs are based on escalation of current costs with allowances for "cyclical" activities in particular years of the second review period.
Borrowing costs	Forecasts costs are based on an assumption of debt financing of all capital expenditure at a rate of interest applying to loan funding from the Western Australian Treasury Corporation.

### Issue

Submissions are invited from interested parties on the principal assumptions indicated by the IMO to have been applied in derivation of the forecast of costs for the second review period.

The capital costs included by IMO in its proposed allowable revenue (depreciation and interest) include costs in respect of three capital projects during the second review period that the IMO indicates have been identified in its “Strategic Asset Plan” lodged with the Western Australian Government. These projects are described as:

- market system (WEMS) upgrade, comprising an investment in IT infrastructure for improvement on core market systems (\$5.05 million over the second review period);
- corporate applications (non-WEMS), not further described by the IMO in its proposal (\$565,000); and
- office refurbishment, associated with a change of office location in 2012 (\$825,000).

### Issue

Submissions are invited from interested parties on the proposed capital projects indicated by the IMO to have been included in derivation of the forecast of costs for the second review period.

## 5 System Management Proposal

In the proposal submitted to the Authority, System Management has provided information on actual costs for the first review period and forecast costs for the second review period as indicated in Table 5.1.

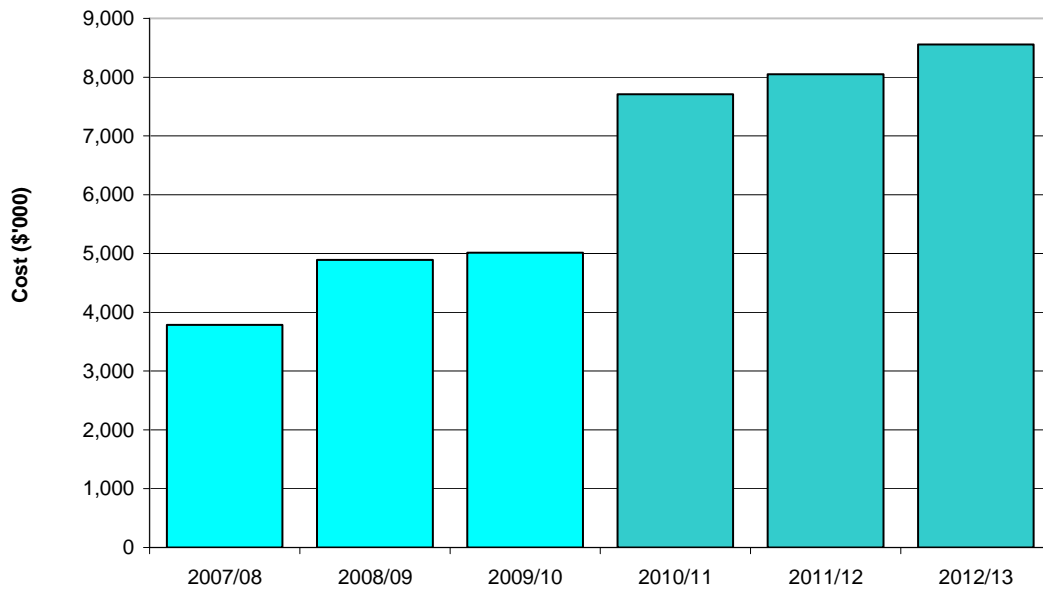
**Table 5.1 System Management: actual costs for the first review period (2007/08 to 2009/10) and proposed allowable revenue for the second review period (2010/11 to 2012/13) (nominal \$'000)**

Cost item	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
	Actual	Actual	Forecast	Forecast	Forecast	Forecast
Recurrent costs						
Employee benefits	2,401	3,003	3,247	3,888	4,370	4,823
Functional costs	105	483	490	486	526	556
Legal costs	292	339	363	375	385	400
Insurance costs	150	165	200	210	221	232
IT operating expenditure	73	98	120	445	468	497
<b>Total recurrent costs</b>	<b>3,021</b>	<b>4,008</b>	<b>4,420</b>	<b>5,404</b>	<b>5,970</b>	<b>6,580</b>
Capital costs						
IT capital expenditure	767	803	592	1090	750	690
Windfarm forecasting software tool				420	120	120
Dispatch Decision Support Simulator				797	193	202
Dispatcher Training Simulator				0	1,014	1,035
<b>Total capital costs</b>	<b>767</b>	<b>803</b>	<b>592</b>	<b>2,307</b>	<b>2,077</b>	<b>2,047</b>
<b>Total costs</b>	<b>3,788</b>	<b>4,891</b>	<b>5,012</b>	<b>7,711</b>	<b>8,047</b>	<b>8,555<sup>8</sup></b>

Information provided in System Management's proposal indicates a step increase in costs of about \$2.7 million from the last year in the first review period to the first year in the second review period, and a trending increase in costs for the second review period of 5.3 per cent in nominal terms (Figure 5.1).

<sup>8</sup> The total proposed allowable revenue for 2012/13 is indicated in the System Management proposal to be \$8,549,000, which appears to be an error in addition.

**Figure 5.1** System Management: actual costs for the first review period (2007/08 to 2009/10) and proposed allowable revenue for the second review period (2010/11 to 2012/13) (nominal \$'000)



Principal assumptions indicated by the System Management to have been applied in derivation of the forecast of recurring costs for the second review period are indicated in Table 5.2.



**Table 5.2 Principal assumptions indicated by System Management to have been applied in derivation of forecasts of recurring costs for the second review period**

Cost or calculation parameter	Assumption or basis of cost forecast
Escalation rate for general inflation of unit costs	Not specified.
Employment benefit costs	<p>Creation of four additional staff positions.</p> <p>Increases in direct labour costs based on “System Management’s assessment of likely general increases in staff costs” of:</p> <p>2010/11- 5%</p> <p>2011/12- 5%</p> <p>2012/13- 7%</p> <p>Labour on-costs of 25% of direct labour costs, consistent with historical costs.</p>
Function costs	<p>Indicated by System Management to comprise costs in categories of monitoring and compliance, updating ancillary service requirements, ancillary service contracts, corporate governance, audit, external analysis, travel and staff development, and contractors and consultants.</p> <p>No information is provided on methods or assumptions for derivation of cost forecasts.</p>
Legal costs	<p>Information on methods and assumptions for derivation of cost forecasts is limited to an indication that forecast amounts are based on “experience in the first review period”.</p>
Insurance costs	<p>Indicated to be based on a share of Western Power’s insurance costs, but it is not indicated what this share is or how it was determined.</p> <p>Assumed to increase by 5% per annum.</p>
IT operating costs	<p>Indicated to include ongoing costs of IT operating support and new costs of obtaining data from the Bureau of Meteorology, infrastructure support and operating and licence costs of the System Management’s market IT system (SMMITS).</p> <p>No information is provided on methods or assumptions for derivation of cost forecasts.</p>

### Issue

Submissions are invited from interested parties on the principal methods and assumptions indicated by System Management to have been applied in derivation of the forecast of recurring costs for the second review period.

The capital costs included by System Management in its proposal comprise of cost items referred to as “IT Capex” and three items relating to particular projects and referred to as “operational capital assets”. These cost items are described as follows.

- IT Capex, described as recovery of capital expenditure through the amortisation of information technology software assets. New investment in the second review period is indicated to be for improved reporting capabilities, development of modelling tools to support decisions to approve generation outages, modification

of the SCADA system to accommodate competitively procured ancillary services, and contingency amounts to adapt to changes in the Market Rules. No information is provided on the derivation of cost forecasts.

- Windfarm forecasting software tool, described as one of the software tools (namely ANEMOS) System Management will procure for forecasting wind, necessary to maintain power system security (with capital and operating costs of \$660,000).
- Dispatch decision support simulator (also referred to in the proposal as the dispatch decision support system), indicated to be a tool to improve dispatch decisions (with capital and operating costs of \$1.192 million).
- Dispatcher training simulator, described as a computer based training system for operators of electrical power systems, necessary to maintain system security (with capital and operating costs of \$2.049 million).

#### Issue

Submissions are invited from interested parties on the proposed capital projects indicated by System Management to have been included in derivation of the forecast of costs for the second review period.

It is not clear from System Management's proposal whether the costs for these projects are entirely capital costs, or whether amounts of operating costs are included. Furthermore, it is not clear from System Management's proposal whether amounts of capital cost represent the actual expenditure on the capital elements of the projects, or amounts of depreciation and amortisation (as required in the derivation of allowable revenue). The Authority will be investigating both of these matters.